Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-30. (CANCELLED)

31. (CURRENTLY AMENDED) A method according to claim ~~30~~ 88, wherein the protein or peptide comprises more than one disulfide bridge.

32. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 or 31~~ claim 88, wherein said irradiation step comprises light of a wavelength that excites one or more aromatic amino acids.

33. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 32~~ claim 88, wherein said irradiation step comprises light of a wavelength that excites one specific aromatic amino acid.

34. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 33~~ claim 33, wherein said aromatic amino acid(s) is/are selected from tryptophan, tyrosine, and phenylalanine.

35. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 34~~ claim 34, wherein the irradiation is performed by multi-photon excitation, preferably by two-photon excitation.

36. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 34~~ claim 34, wherein said irradiation comprises light with a wavelength of about 295nm,

275nm, or 254nm.

37. (PREVIOUSLY PRESENTED) A method according to claim 34, wherein said aromatic amino acid is tryptophan.

38. (PREVIOUSLY PRESENTED) A method according to claim 36, wherein the wavelength is about 295nm.

39. (CURRENTLY AMENDED) A method according to ~~any one of claims 31 to 38~~ claim 33, further comprising the steps of:

a) verifying one or more disulfide bridges in said protein or peptide~~,~~;

b) identifying one or more aromatic amino acid residues being a spatial neighbour of said one or more disulfide bridges, for the transfer of excitation energy from said one or more aromatic amino acid to said one or more disulfide bridges~~,~~; and

c) selecting a wavelength which specifically excites one or more of said aromatic amino acid residues, thereby disrupting one or more of said disulfide bonds.

40. (PREVIOUSLY PRESENTED) A method according to claim 39 wherein the aromatic amino acid residue is within 10Å of the disulfide bridge.

41. (PREVIOUSLY PRESENTED) A method according to claim 40, wherein the plane of the dipole of the side-chain of the aromatic amino acid is not orthogonal to the plane of the disulfide bridge.

42. (CURRENTLY AMENDED) A method according to ~~claims 39-41~~ claim 39, wherein the amino acid residues located within an 8Å radius of the indole ring of said

aromatic amino acid residue are over-represented by amidic amino acid residues (Asn, Gln)~~,~~ as well as~~,~~ short aliphatic amino acid residues (Gly, Ala, Val) and/or long aliphatic amino acid residues (Leu, Ile) by at least 1 fold, and under-represented by charged amino acids (His, Lys, Arg)(Asp, Glu) and proline residues by at least 1 fold.

43. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 38~~ claim 88, wherein said protein or peptide is irradiated in the presence of a free aromatic amino acid.

44. (CURRENTLY AMENDED) A method according to ~~any one of claims 30 to 43~~ claim 88, wherein said coupling is an immobilization on said support.

45. (PREVIOUSLY PRESENTED) A method according to claim 44, wherein said immobilization is spatially controlled.

46. (PREVIOUSLY PRESENTED) A method according to claim 45, wherein said support is a derivatised support that is capable of binding a thiol group.

47. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said support comprises a thiol group or a disulfide bridge.

48. (PREVIOUSLY PRESENTED) A method according to claim 47, wherein the support comprises a spacer.

49. (PREVIOUSLY PRESENTED) A method according to ~~any one of claims 30 to 48~~ claim 88, wherein the coupled protein or peptide can ~~furthermore~~ be released from the carrier by irradiating the coupled protein or peptide to create a thiol group in the protein or peptide by disulfide bridge disruption.

50. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said support comprises gold.

51.-87. (CANCELLED)

88. (CURRENTLY AMENDED) A method of coupling a disulfide bridge containing protein or peptide to a carrier comprising the following steps:

a) irradiating the protein or peptide to create a thiol group in the protein or peptide by disulfide bridge disruption~~,~~ ; and

b) incubating the irradiated protein or peptide with a carrier capable of binding a thiol group and thereby obtaining a coupling,

or

a) incubating the protein or peptide with a carrier capable of binding a thiol group~~,~~ ; and

b) irradiating the protein or peptide in the presence of said carrier to create a thiol group in the protein or peptide by disulfide bridge disruption and thereby obtaining a coupling,

wherein the carrier is an insoluble support whereon more than one disulfide-bridge-containing protein or peptide are coupled, each protein or peptide being coupled to said carrier through said created thiol group; or

~~wherein the carrier is soluble and capable of being decoupled from said protein or peptide by irradiation.~~

89. (NEW) A method according to claim 32, wherein the coupling is limited to one or more focal point(s) of illumination.

90. (NEW) A method according to claim 32, wherein the focal point is 1 micrometer of less.

91. (NEW) A method according to claim 88, wherein said support is an electronic chip, slide, wafer, particle, resin, well, tube, or membrane.

92. (NEW) A method according to claim 39, wherein said support is an electronic chip, slide, wafer, particle, resin, well, tube, or membrane.